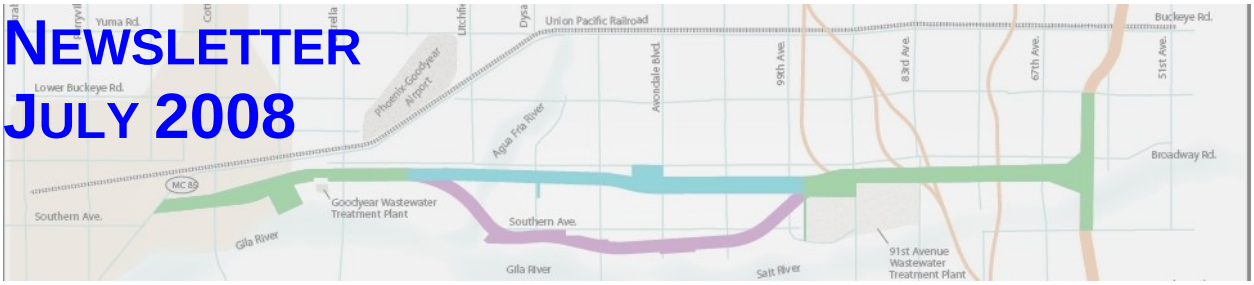
Arizona Transportation Research Center



NEWSLETTER JULY 2008

State Planning and Research (SPR) Projects

SPR-596, *Evaluation of Photo Radar for Freeway Enforcement*

Use of traffic cameras have been proven on municipal streets. However, it is technically a much more challenging operating environment to attempt to employ these devices on high volume, high-speed, multi-lane freeways. This research focused on the technical problems arising from such a deployment. The primary question was which vendors can provide systems to provide a viable technical solution that will accurately measure the Phoenix metro regional freeway speeding problems. A related question was whether a conceptual trial deployment and accompanying field test plan could be developed to demonstrate the technical aspects of potential systems. The research was limited to the technical aspects of a photo enforcement system. A violation management system would also need to be studied in detail to fully examine the viability of photo speed enforcement.

Systems from six manufacturers were compared against 12 desired characteristics for freeway photo radar use. In addition, 13 government entities from around the world who currently use or have used photo radar were interviewed about their experiences. While all the desired ideal characteristics were not available in any one system, continued advancements in this technology indicated that the technical problems can be solved.

SPR-598, *Analysis of Bicycle Lanes (BL) Versus Wide Curb Lanes (WCL)*

The study evaluated the relative merits of bicycle lanes and wide curb lanes for bicycle riders. A bicycle lane is typically described as a portion of the roadway reserved for the exclusive use of bicycle traffic. The land may be delineated by signing, striping and pavement markings. A wide curb land is commonly defined as a traffic lane at least 14 feet in width. The lane can be shared by motor vehicles and bicycles.

The report contains three sections. The first is a literature review. The second part is a survey of bicycle facility experts at selected state transportation departments. The third section is a summary of reports on fatalities resulting from bicycle collisions with motor vehicles in Arizona. Based on the data available, the study did not find a relationship between bicycle-vehicle fatal accidents and the type of bicycle facility.

COMPLETED PROJECTS

All recent published reports and many archival reports are available online at:
www.azdot.gov/TPD/ATRC/Publications/project_reports/index.asp

ATRC LIBRARY

ATRC library information, including the library catalogue, is available online at:
http://www.azdot.gov/TPD/ATRC/library/index.asp

SMALL BUDGET PROJECTS

The small budget program provides research funding throughout the year for projects with budgets up to $25,000. Two small budget projects were recently added to the research program.

- SPR-663, *Development of Intersection Performance Measures for Timing Plan Maintenance Using an Actuated Controller – Phase I* (budget: $25,000)
- SPR-670, *Restraint Use (Seat belt and child passenger seats) Survey* (budget $25,000)

AASHTO RESEARCH ADVISORY COMMITTEE MEETING

The American Association of State Highway and Transportation Officials (AASHTO) national Research Advisory Committee (RAC) held its summer meeting from July 14-17, 2008 in Portland, Maine. In addition to national updates from the Federal Highway Administration, AASHTO, the Transportation Research Board and the Research and Innovative Technology Administration, there was a review of the recent international research scan. Additional discussions covered research idea solicitation and innovative funding for research projects. The Committee has also created eight task groups that are focusing on providing support to AASHTO on specific research program issues, such as program management, coordination and collaboration, and education. Frank Darmiento, the Arizona RAC representative, attended the meeting.

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Louis Casillas – Engineering Assistant

ATRC project manager, John Semmens, will retire during August 2008 after more than 30 years with ADOT. John has successfully managed a broad range of significant projects. He is also a published author, recently contributing to *Street Smart*, a widely acclaimed book that examines private, market-based alternatives for road services, both in theory and practice.

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